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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,414	07/11/2002	Mong-Ling Chiao	ASIP0004USA	7464

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NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)  
P.O. BOX 506  
MERRIFIELD, VA 22116

EXAMINER
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THOMAS, SHANE M

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/064,414

Applicant(s)

CHIAO ET AL.

Examiner

Shane M Thomas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-19 is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,9 and 11-14 is/are rejected.
- 7) ☒ Claim(s) 6,8 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/14/2004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-5, 7, 9, and 12, are rejected under 35 U.S.C. 102(e) as being anticipated by Shmueli et al. (U.S. Patent Application Publication No. 2002/0162009).

As per claim 1, Shmueli shows in figure 1 a secure flash memory device 10 for a computer 12. The secure flash memory device 10 comprises a connection port 24 connecting the flash memory device 10 to the computer 12 and a microcontroller (not shown, but taught by Shmueli in ¶26 as control circuitry that is used to assist in interaction with the host), which is electrically connected to the connection port 24 in order to communicate with the host (¶26). Shmueli also shows in figure 1 a flash memory 18 that is electrically connected to the microcontroller since the --microcontroller organizes data 22 (¶26). Shmueli teaches in ¶36 and ¶44 a pre-installed security program (authentication program) for limiting access to the flash memory 18 that is run by the computer 12. Paragraph 44 teaches that the security program is executed by the computer 12 when the computer 12 requests to access the memory via the [control logic] through the connection port 24. Finally, ¶¶ 36-37 teach that when the security

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program is executed a pass code stored in the computer is compared with a predetermined code stored in the flash memory device. The Examiner is interpreting the pass code *stored in the computer* to be buffered by the computer when the user enters the pass code, thus the pass code is stored in the computer 12. The pass code in the flash memory device 10 is stored in a form understandable by the security program since the security program compares the pass code stored in the flash memory device 10 with the pass code stored in the computer 12 in order to prevent access of data on the device 10 between the device and the computer 12 via the connection port 24 (§44). If the pass codes do match, the microcontroller allows data to be exchanged between the connection port 24 to the computer 12 and the flash memory device 10. (refer to §§ 25 and 44).

As per claim 3, Shmueli teaches that there can be a plurality of partitions of the flash memory 18 and the security program (authorization program) determines how information can be exchanged between the connection port 24 and each partition. One way, would be to associate a pass code only with a high security level (§42).

As per claim 4, Shmueli teaches that the predetermined code is capable of being set by a user in §79.

As per claim 5, Shmueli teaches in §44 that the predetermined code is encrypted.

As per claim 7, Shmueli teaches in §44 that the predetermined code is stored in the flash memory.

As per claim 9, Shmueli teaches in §36 that the security program (authentication program) is stored in the flash memory 18 as a keylet.

As per claim 12, Shmueli teaches in §92 that the connection port is a USB port.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shmueli et al. (U.S. Patent Application Publication No. 2002/0162009).

As per claim 11, Shmueli does not specifically state that the interface used to input the password is a GUI but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used a GUI in order to have prompted a user to input a password so it would have been easier for the user to have seen when to input a password or when changing the predetermined code (§79).

As per claim 13, Shmueli fails to teach the connection port 24 of figure 1 as being an integrated drive electronics (IDE) port. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used an IDE connection in the secure memory device of Shmueli as IDE protocols are known to provide superior transfer rates to mass storage devices than that of the USB protocol, thereby allowing faster accesses with a larger bandwidth connection.

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Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shmueli et al. (U.S. Patent Application Publication No. 2002/0162009) in view of Brandt et al. (U.S. Patent No. 5,892,905).

As per claim 14, Shmueli does not teach specifically using HTML as the programming language to code the security program, although Shmueli does teach that some of the keylets are coded in a markup language (¶¶48-49). However, Shmueli does teach in ¶32 that keylets are often written in any software technology facilitating ready executing on a computer 12, of which HTML is such a type as known in the art. Brandt teaches in the abstract the HTML is a well-known language that can be used by any computer on the market today. Brandt further states that HTML is well-controlled and standardized language where new application features can be added as they are developed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have written the security program of Shmueli in HTML, in accordance to the teachings of Brandt in order to have been able to have had the software of the secure firmware device run on a wide variety of computers on the market.

***Allowable Subject Matter***

Claims 6,8, and 10, are objected to as being dependent upon a rejected base claim, but would be allowable over the prior art of record if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15-19 are allowable over the prior art of record.

The following is a statement of reasons for the indication of allowable subject matter:

As per claim 6, Shmueli does not specifically teach the predetermined code of the flash memory device being stored *within* the microcontroller (control circuitry of Shmueli).

As per claims 8 and 19, Shmueli does not specifically teach the security program being stored *within* the microcontroller (control circuitry of Shmueli).

As per claims 10 and 15, Shmueli does not specifically teach storing a portion of the security program code *within* the microcontroller (control circuitry of Shmueli).

As per claims 16-18, the claims are allowable over the prior art of record as being dependent upon allowable claims.

***Response to Arguments***

Applicant arguments, see pages 6-9, of amendment filed 7 July 2004, with respect to the rejections of claims 1-5,7,8,10,12, and 15-17 under §102(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Shmueli et al. (U.S. Patent Application Publication 2002/0162009). Shmueli teaches a flash memory device capable of executing a security program

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stored on the flash memory device by a computer to which the device is connected, thereby allowing access to the flash memory device upon authentication by a user.

***Response to Amendments***

As per the Applicant's amendment filed 7 July 2004:

- (i) The objections to the specification have been respectfully withdrawn hereto;
- (ii) The rejections of claims 1-5,7,8,10,12, and 15-17 under 35 U.S.C. 102(e) as being anticipated by Shmueli et al. (U.S. Patent Application Publication No. 2002/0162009) has been respectfully withdrawn hereto.
- (iii) The rejection of claim 6 under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. Patent Application Publication No. 2002/0010827) in view of Kobayashi et al. (U.S. Patent Application Publication No. 2004/0042363) has been respectfully withdrawn hereto;
- (iv) The rejection of claim 9 under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. Patent Application Publication No. 2002/0010827) in view of Bean et al. (U.S. Patent Application Publication No. 2003/0074577) has been respectfully withdrawn hereto;
- (v) The rejections of claims 11 and 13 under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. Patent Application Publication No. 2002/0010827) has been respectfully withdrawn;
- (vi) The rejections of claims 14,18, and 19 under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. Patent Application Publication No. 2002/0010827) in view of Brandt et al. (U.S. Patent No. 5,892,905) has been respectfully been withdrawn;

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(vii) Claims 1, 3-5, 7, 9, and 12, stand rejected under 35 U.S.C. 102(e) as being anticipated by Shmueli et al. (U.S. Patent Application Publication No. 2002/0162009);

(viii) Claims 11 and 13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Shmueli et al. (U.S. Patent Application Publication No. 2002/0162009);

(ix) Claim 14 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Shmueli et al. (U.S. Patent Application Publication No. 2002/0162009) in view of Brandt et al. (U.S. Patent No. 5,892,905).

(x) Claims 6,8,10, and 15 - 19 are allowable over the prior art of record;

(xi) Claim 2 has been canceled by the Applicant.

### ***Conclusion***

KeySafe™ (*Using Multilingual KeySafe™*) teaches on page 12 that the KeySafe™ security program is stored on a portion of the flash memory of a secure flash memory device.

Disgo ([www.mydisgo.com/press/press\\_releases/article\\_3.php](http://www.mydisgo.com/press/press_releases/article_3.php)) shows a date (11 December 2001) for the KeySafe™ reference.

Gnanasabapathy et al. (U.S. Patent Application Publication 2003/0023871) teaches a microcontroller (12, figure 1) which executes a security program stored in the flash memory 22.

Ziv et al. (U.S. Patent Application Publication 2004/0103288) teaches a security program for securing private information with a password on a flash memory device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane M Thomas whose telephone number is (703) 605-0725.

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Please note: the aforementioned number will change to (571) 272-4188 effective October 15, 2004. The examiner can normally be reached M-F 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt M Kim can be reached on (703) 305-3821, which will change to (571) 272-4182 effective October 15, 2004. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Shane M. Thomas



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